

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/492,029

DATE: 12/07/2000
TIME: 10:22:40

Does Not Comply
Corrected Diskette Needed

Input Set : A:\-927-1.app
Output Set: N:\CRF3\12072000\I492029.raw

3 <110> APPLICANT: Zuker, Charles S.
4 Adler, Jon Elliot
5 Lindemeier, Juergen
6 The Regents of the University of California
7 The Regents of the University of California
8 <120> TITLE OF INVENTION: Assays for Sensory Modulators Using a Sensory Cell
9 Specific G-Protein Beta Subunit
10 <130> FILE REFERENCE: 02307E-092710US
11 <140> CURRENT APPLICATION NUMBER: US 09/492,029
12 <141> CURRENT FILING DATE: 2000-01-26
13 <150> PRIOR APPLICATION NUMBER: US 60/117,404
14 <151> PRIOR FILING DATE: 1999-01-27
15 <160> NUMBER OF SEQ ID NOS: 5
16 <170> SOFTWARE: PatentIn Ver. 2.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 156
19 <212> TYPE: DNA
20 <213> ORGANISM: Rattus sp.
21 <220> FEATURE:
22 <223> OTHER INFORMATION: rat tongue circumvallate papillæ taste receptor
23 cell cDNA clone 165-17
24 <400> SEQUENCE: 1
25 aacaaaaggg cataaaagaaa gtggctggga gggagccagg atactaggag tgacacctat 60
26 agtcatgggc tgagcgctct ggccatccc argccggaca aaggctgctg gtggccagg 120
27 agtcatctag ggtggggagg gtctgttctt gtttat 156
28 <210> SEQ ID NO: 2
29 <211> LENGTH: 1520
30 <212> TYPE: DNA
31 <213> ORGANISM: Rattus sp.
32 <220> FEATURE: (1097)
33 <221> NAME/KEY: CDS
34 W--> 45 <222> LOCATION: (78). (2000)
35 <223> OTHER INFORMATION: rat taste cell specific G-protein beta 3 subunit
36 (TC-Gbeta3)
37 <400> SEQUENCE: 2
38 gggcgctgg gaagcgaaa cctggagaa atccagctag agccaaagag ccaggactac 60
39 cccttgcacct gtgaacc atg ggg gag atg gag cag ctg aag cag gaa gcg 110
40 Met Gly Glu Met Glu Gln Leu Lys Gln Glu Ala
41 1 5 10
42 qag cag ctc aag aag cag att gct gat gcc agg aaa gcc tgt qcg gac 158
43 Glu Gln Leu Lys Lys Gln Ile Ala Asp Ala Arg Lys Ala Cys Ala Asp
44 15 20 25
45 atc act ctg gct gag ctt gtg tct ggc ctg gag gtg gta cga gtc 206
46 atc act ctg gct gag ctt gtg tct ggc ctg gag gtg gta cga gtc 206
47 Ile Thr Leu Ala Glu Leu Val Ser Gly Leu Glu Val Val Gly Arg Val
48 30 35 40
49 cag atg cgg aca cgg aag acq lta agg gga cac ctg gct aag atc tat 254
50 Gln Met Arg Thr Arg Arg Thr Leu Arg Gly His Leu Ala Lys Ile Tyr
51 45 50 55
52

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/492,029

DATE: 12/07/2000
TIME: 10:22:40

Input Set : A:\-927-1.app
Output Set: N:\CRF3\12072000\I492029.raw

68	gcc atg cac tgg gcc act gac tct aag ctg cta gta agt gcc tcg cag	302
69	Ala Met His Trp Ala Thr Asp Ser Lys Leu Leu Val Ser Ala Ser Gln	
70	60 65 70 75	
72	gat ggg aag ctg atc qtg tgg gac act tac acc acc aat aag qtg cat	350
73	Asp Gly Lys Leu Ile Val Trp Asp Thr Tyr Thr Asn Lys Val His	
74	80 85 90	
76	qct atc ccq ctq cgt tcc tcc tgg gtc atg acc tct gcc tat gca cca	398
77	Ala Ile Pro Leu Arg Ser Ser Trp Val Met Thr Cys Ala Tyr Ala Pro	
78	95 100 105	
80	100 105	446
81	tca ggg aac ttc gtg gca tgt ggg ggg cta gat aac atg tgc tca atc	
82	Ser Gly Asn Phe Val Ala Cys Gly Gly Leu Asp Asn Met Cys Ser Ile	
84	110 115 120	494
85	Tyr Ser Leu Lys Ser Arg Glu Gly Asn Val Lys Val Ser Arg Glu Leu	
86	125 130 135	542
88	tcg gct cac aca ggt tat ctc tcc tgt tgc cgc ttc ctg gat gac aac	
89	Ser Ala His Thr Gly Tyr Leu Ser Cys Cys Arg Phe Leu Asp Asp Asn	
90	140 145 150 155	590
92	aac att gtg act aac tct ggg gac acc acg tgt gcc ttg tgg gac att	
93	Asn Ile Val Thr Ser Ser Gly Asp Thr Thr Cys Ala Leu Trp Asp Ile	
94	160 165 170	638
96	gag acg ggg cag cag aag aca gtg ttc gtg gga cac act ggt gac tgc	
97	Glu Thr Gly Gln Gln Lys Thr Val Phe Val Gly His Thr Gly Asp Cys	
98	175 180 185	686
100	atg aac ctg gct gtg tcc cca qac tac aaa ctc ttc atc tcg gga gct	
101	Met Ser Leu Ala Val Ser Pro Asp Tyr Lys Leu Phe Ile Ser Gly Ala	
102	190 195 200	734
104	tgt gat gcc aac gcc aag ctc tgg gat gtg agg gaa ggg acc tct cgc	
105	Cys Asp Ala Ser Ala Lys Leu Trp Asp Val Arg Glu Gly Thr Cys Arg	
106	205 210 215	782
108	cag act ttc act ggc cac gag tca gac atc aat gct atc tgt ttc ttt	
109	Gln Thr Phe Thr Gly His Glu Ser Asp Ile Asn Ala Ile Cys Phe Phe	
110	220 225 230 235	830
112	ccc aat ggg gag gcc atc tgc act ggc tca gat gat gcc tcc tgc cgc	
113	Pro Asn Gly Glu Ala Ile Cys Thr Gly Ser Asp Asp Ala Ser Cys Arg	
114	240 245 250	878
116	ctc ttt gac ctg agg gca gac cag gaa ctg aca gac tac tcc cac qag	
117	Leu Phe Asp Leu Arg Ala Asp Gln Glu Leu Thr Ala Tyr Ser His Glu	
118	255 260 265	926
120	agc atc atc tgt ggc atc acg tcc gta gcc ttc tca ctc agt ggt cgc	
121	Ser Ile Ile Cys Gly Ile Thr Ser Val Ala Phe Ser Leu Ser Gly Arg	
122	270 275 280	974
124	ctg ctc ttt gct ggc tat gat gac ttc aac tgc aat gtc tgg gac tct	
125	Leu Leu Phe Ala Gly Tyr Asp Asp Phe Asn Cys Asn Val Trp Asp Ser	
126	285 290 295	1022
128	ctg aag tgt gag cgt gta ggc gtt ctt tct ggc cat gac aac aga gtc	
129	Leu Lys Cys Glu Arg Val Gly Val Leu Ser Gly His Asp Asn Arg Val	
130	300 305 310 315	1070
132	agt tgc ctg ggg gtc aca gct gac ggc atg gct gtg gcc act gga tcc	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/492,029

DATE: 12/07/2000
TIME: 10:22:40

Input Set : A:\-927-1.app
Output Set: N:\CRF3\12072000\I492029.raw

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/492,029

DATE: 12/07/2000
TIME: 10:22:40

Input Set : A:\-927-1.app
Output Set: N:\CRF3\12072000\I492029.raw

209 Ala Asp Gln Glu Leu Thr Ala Tyr Ser His Glu Ser Ile Ile Cys Gly
210 260 265 270
212 Ile Thr Ser Val Ala Phe Ser Leu Ser Gly Arg Leu Leu Phe Ala Gly
213 275 280 285
215 Tyr Asp Asp Phe Asn Cys Asn Val Trp Asp Ser Leu Lys Cys Glu Arg
216 290 295 300
218 Val Gly Val Leu Ser Gly His Asp Asn Arg Val Ser Cys Leu Gly Val
219 305 310 315 320
221 Thr Ala Asp Gly Met Ala Val Ala Thr Gly Ser Trp Asp Ser Phe Leu
222 325 330 335
224 Lys Ile Trp Asn
225 340
229 <210> SEQ ID NO: 4
230 <211> LENGTH: 1523
231 <212> TYPE: DNA
232 <213> ORGANISM: HOMO sapiens
234 <220> FEATURE:
235 <221> NAME/KEY: CDS
236 <222> LOCATION: (7)..(1029)
237 <223> OTHER INFORMATION: human taste cell specific G-protein beta 3 subunit
239 <400> SEQUENCE: 4
240 gggtcg atg ggg gag atg gag caa ctg cgt cag gaa gcg gag cag ctc 48
241 Met Gly Glu Met Glu Gln Leu Arg Gln Glu Ala Glu Gln Leu
242 1 5 10 96
244 aag aag cag att gca gat gcc agg aaa gcc ttt gct gac gtt act ctg
245 Lys Lys Gln Ile Ala Asp Ala Arg Lys Ala Cys Ala Asp Val Thr Leu
246 15 20 25 144
248 gca gag ctg gtg tct ggc cta gag gtg gtg gga cca gtc cag atg cgg
249 Ala Glu Leu Val Ser Gly Leu Glu Val Val Gly Arg Val Gln Met Arg
250 35 40 45 192
252 acg cgg cgg acg tta agg gga cac ctg gcc aag att tac gcc atg cac
253 Thr Arg Arg Thr Leu Arg Gly His Leu Ala Lys Ile Tyr Ala Met His
254 50 55 60 240
256 tgg gcc act gat tct aag ctg ctg gta agt gcc tcc caa gat ggg aag
257 Trp Ala Thr Asp Ser Lys Leu Leu Val Ser Ala Ser Gln Asp Gly Lys
258 65 70 75 288
260 ctg atc gtg tgg qac aqc tac acc acc aac aag gtg cac gcc atc cca
261 Leu Ile Val Trp Asp Ser Tyr Thr Asn Lys Val His Ala Ile Pro
262 80 85 90 336
264 ctg cgc tcc tcc tgg gtc atg acc ttt gcc tat gcc cca tca ggg aac
265 Leu Arg Ser Ser Trp Val Met Thr Cys Ala Tyr Ala Pro Ser Gly Asn
266 95 100 105 110 384
268 ttt gtg gca ttt ggg ggg ctg gac aac atg ttt tcc atc tac aac ctc
269 Phe Val Ala Cys Gly Gly Leu Asp Asn Met Cys Ser Ile Tyr Asn Leu
270 115 120 125 432
272 aaa tcc cgt gag ggc aat gtc aag gtc aac cgg gag ctt tct gtc cac
273 Lys Ser Arg Glu Gly Asn Val Lys Val Ser Arg Glu Leu Ser Ala His
274 130 135 140 480
276 aca ggt tat ctc tcc tgc tgc ttc ctg gat gac aac aat att gtg

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/492,029DATE: 12/07/2000
TIME: 10:22:40Input Set : A:\-927-1.app
Output Set: N:\CRF3\12072000\I492029.raw

277 Thr Gly Tyr Leu Ser Cys Cys Arg Phe Leu Asp Asp Asn Ile Val
278 145 150 155 528
280 acc aqc tcg ggg gac acc acg tgc ttt tgg gac att gag act ggg
281 Thr Ser Ser Gly Asp Thr Thr Cys Ala Ile Trp Asp Ile Glu Thr Gly
282 160 165 170 576
284 cag cag aag act gta ttt gtg gga cac acg ggt gac tgc atg agc ctg
285 Gln Gln Lys Thr Val Phe Val Gly His Thr Gly Asp Cys Met Ser Leu
286 175 180 185 190 624
288 gct gtt tct cct gac ttc aat ctc ttc att tcg ggg gcc tgc gat gcc
289 Ala Val Ser Pro Asp Phe Asn Leu Phe Ile Ser Gly Ala Cys Asp Ala
290 195 200 205 672
292 agt gcc aag ctc tgg gat gtc cga gag ggg acc tgc cgt cag act ttc
293 Ser Ala Lys Leu Trp Asp Val Arg Glu Gly Thr Cys Arg Gln Thr Phe
294 210 215 220 720
296 act ggc cac gag tgc gac atc aac gcc atc tgc ttc ccc aat gga
297 Thr Gly His Glu Ser Asp Ile Asn Ala Ile Cys Phe Phe Pro Asn GLY
298 225 230 235 768
300 gag gcc atc tgc acg ggc tgg gat gac gtc tcc tgc ttc ttt gac
301 Glu Ala Ile Cys Thr Gly Ser Asp Asp Ala Ser Cys Arg Leu Phe Asp
302 240 245 250 816
304 ctg cgg gca gac cag ctg atc tgc ttc tcc cac gag agc atc atc
305 Leu Arg Ala Asp Gln Glu Leu Ile Cys Phe Ser His Glu Ser Ile Ile
306 255 260 265 270 864
308 tgc ggc atc acg tcc tgg gcc ttc tcc ctc agt ggc cgc cta cta ttc
309 Cys Gly Ile Thr Ser Val Ala Phe Ser Gly Arg Leu Leu Phe
310 275 280 285 912
312 gct ggc tac gac gac ttc aac tgc aat gtc tgg gac tcc atg aag tct
313 Ala Gly Tyr Asp Asp Phe Asn Cys Asn Val Trp Asp Ser Met Lys Ser
314 290 295 300 960
316 gag cgt gtc ggc atc ctc tct ggc cac gat aac agg gtc ctg
317 Glu Arg Val Gly Ile Leu Ser Gly His Asp Asn Arg Val Ser Cys Leu
318 305 310 315 1008
320 gga gtc aca gct gac ggg atg gtc tgg gac aca ggt tcc tgg gac agc
321 Gly Val Thr Ala Asp Gly Met Ala Val Ala Thr Gly Ser Trp Asp Ser
322 320 325 330 1056
324 ttc ctc aaa atc tgg aac tgaggaggt ggagaaaggg aagtggagg
325 Phe Leu Lys Ile Trp Asn
326 335 340
328 cagtgaacac actcagcgc ccctgcgg accccatctc attcagggtgt tctcttctat 1116
330 atccgggtg ccatccac taagtttct ccttgggg cagtggggag catggactg 1176
332 tgcctttggg aggcaqccatc agggacacag gggcaaaagaa ctgcggccatc tccctccatg 1236
334 gcctccctc cccacagtc tcacagcctc tcccttaatg acaaggaca acctggccct 1296
336 ccccaagccct ttgcaggccc acaagacttg agtctqaggc cccagqccct aggattccct 1356
338 ccccaagagcc actacccttgc tcaggcctg ggtggatag ggcgtttggc octgtgacta 1416
340 tggctctggc accacttaggg tccctggccct ttctttatc atgttttctc ctttttctac 1476
342 ctttttttct ctcctaagac acctgcaata aagttagca ccctgg
345 <210> SEQ ID NO: 5
346 <211> LENGTH: 340
347 <212> TYPE: PRT

12/7/00

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/492,029

DATE: 12/07/2000
TIME: 10:22:41

Input Set : A:\-927-1.app
Output Set: N:\CRF3\12072000\I492029.raw

L:45 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:2, CDS LOCATION: (78)..(2000)
L:137 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#: 2, CDS LOCATION:78..2000

12/7/00